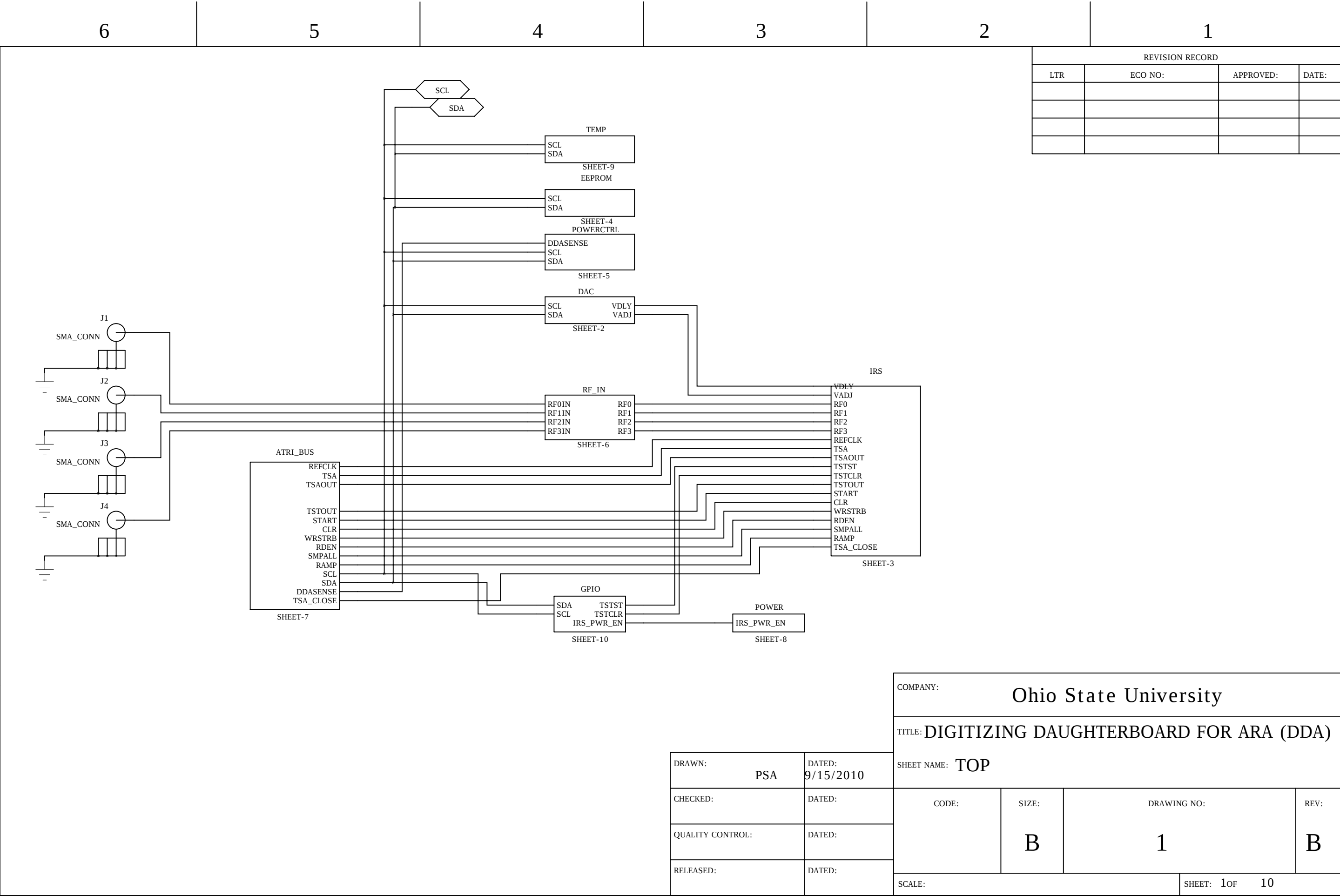




D

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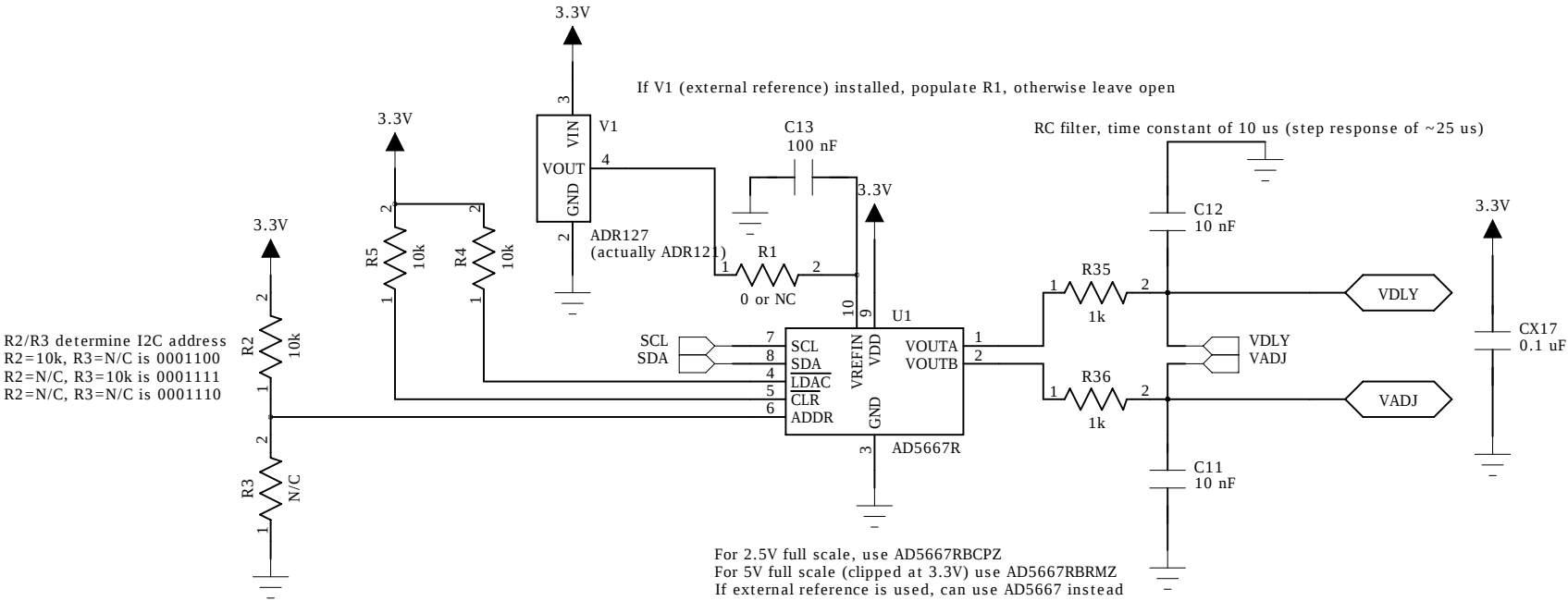
REVISION RECORD			
LTR	ECO NO:	APPROVED:	DATE:

D

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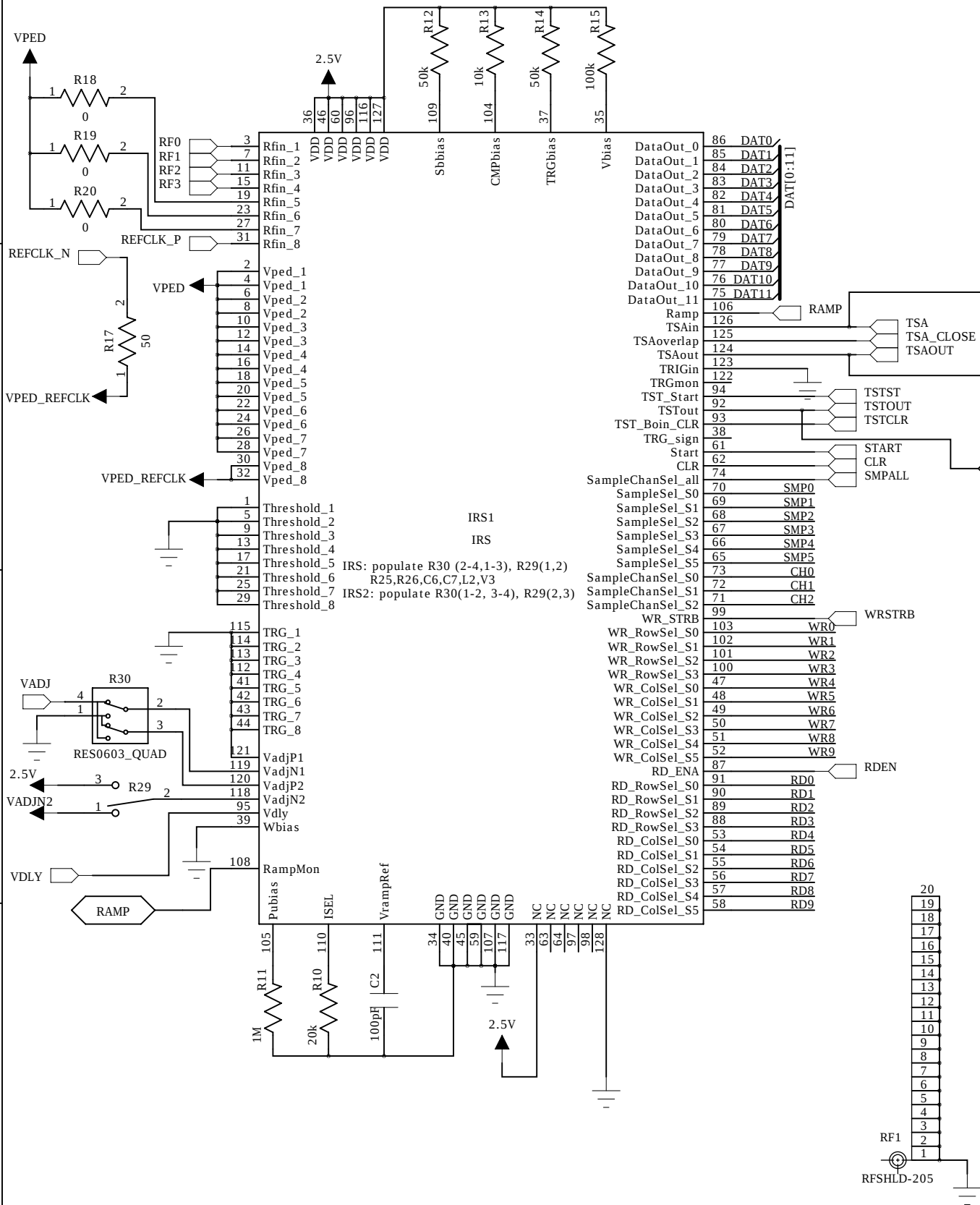
A



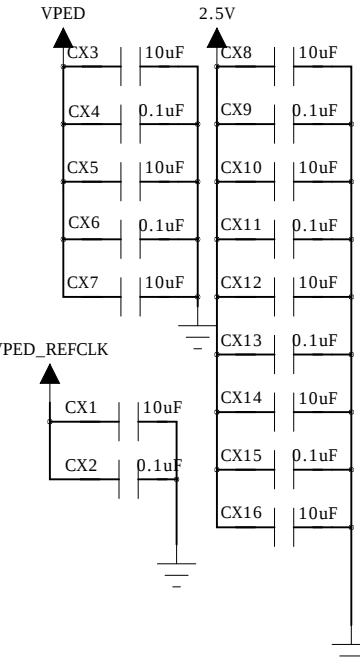
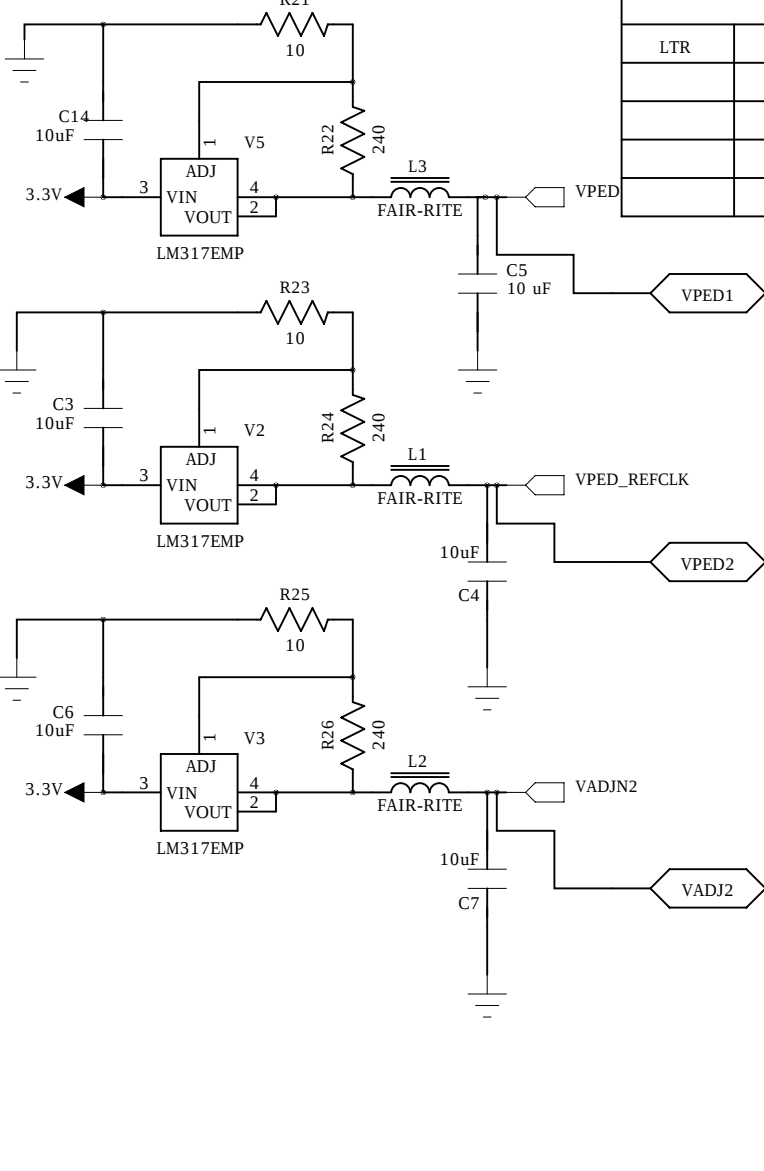
COMPANY: Ohio State University			
TITLE: DIGITIZING DAUGHTERBOARD FOR ARA (DDA)			
SHEET NAME: DAC			
CODE:	SIZE:	DRAWING NO:	REV:
	B	1	B
SCALE:		SHEET: 2 OF 10	

DRAWN: PSA	DATED: 9/15/2010
CHECKED:	DATED:
QUALITY CONTROL:	DATED:
RELEASED:	DATED:

If REFCLK is differential, install R17
Otherwise omit



REVISION RECORD			
LTR	ECO NO:	APPROVED:	DATE:



COMPANY: Ohio State University			
TITLE: DIGITIZING DAUGHTERBOARD FOR ARA (DDA)			
SHEET NAME: IRS			
DRAWN: PSA	DATED: 9/15/2010	CODE:	SIZE:
		DRAWING NO: 1	
CHECKED:	DATED:	REV: B	
QUALITY CONTROL:	DATED:	SCALE:	
RELEASED:	DATED:	SHEET: 3 of 10	

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REVISION RECORD

LTR	ECO NO:	APPROVED:	DATE:

DDA gets A2/A1/A0 = 0/0/0
Device address is 1010000X (0xA0)

1A0

2A1

3A2

4VSS

U2

24LC32A

VCC8

WP7

SCL6

SDA5

3.3V

3.3V

3.3V

R8

N/C

R9

10k

SCL

SDA

CX18

0.1 uF

DRAWN:

PSA

CHECKED:

QUALITY CONTROL:

RELEASED:

DATED:

9/15/2010

DATED:

DATED:

DATED:

COMPANY:

Ohio State University

TITLE:

DIGITIZING DAUGHTERBOARD FOR ARA (DDA)

SHEET NAME:

EEPROM

CODE:

SIZE:

DRAWING NO:

REV:

B

1

B

SCALE:

SHEET: 4Of 10

D

C

B

A

D

C

B

A

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D

C

B

A

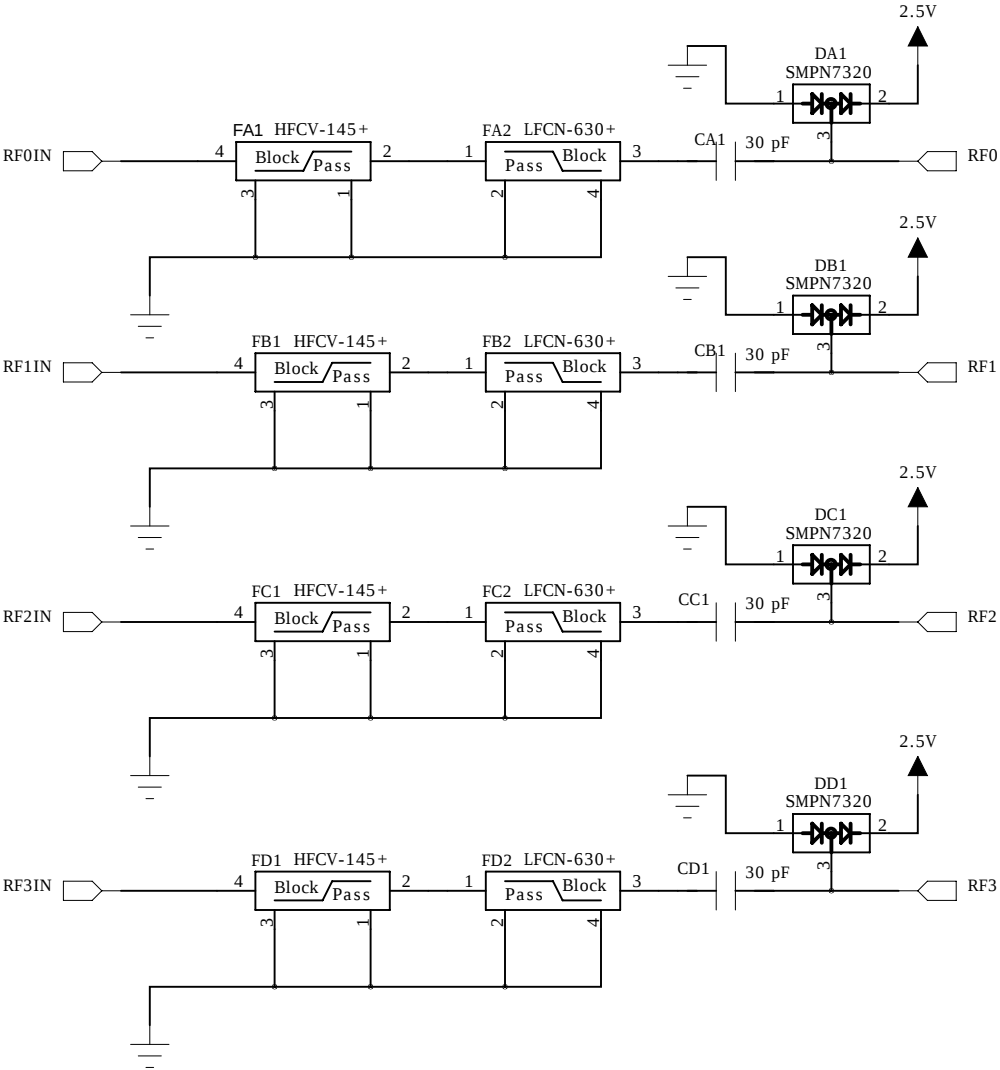
D

C

B

A

REVISION RECORD			
LTR	ECO NO:	APPROVED:	DATE:



30 pF yields 100 MHz low-frequency 3 dB point on 50 ohm

COMPANY: Ohio State University			
TITLE: DIGITIZING DAUGHTERBOARD FOR ARA (DDA)			
SHEET NAME: RF_IN			
CODE:	SIZE:	DRAWING NO:	REV:
	B	1	B
SCALE:			SHEET: 6 OF 10

DRAWN: PSA	DATED: 9/15/2010
CHECKED:	DATED:
QUALITY CONTROL:	DATED:
RELEASED:	DATED:

6

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D

C

B

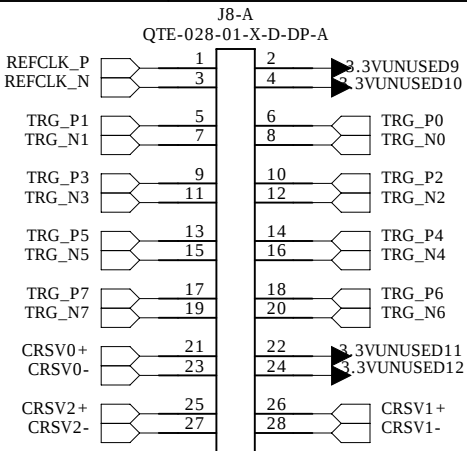
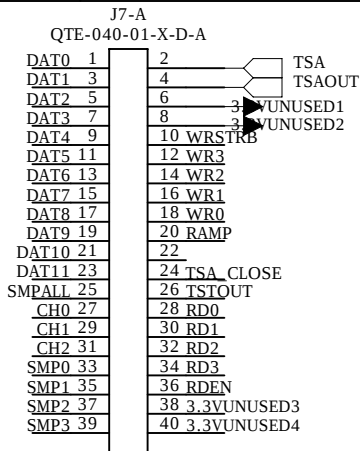
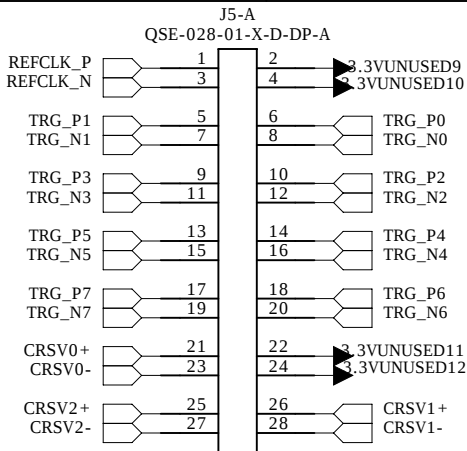
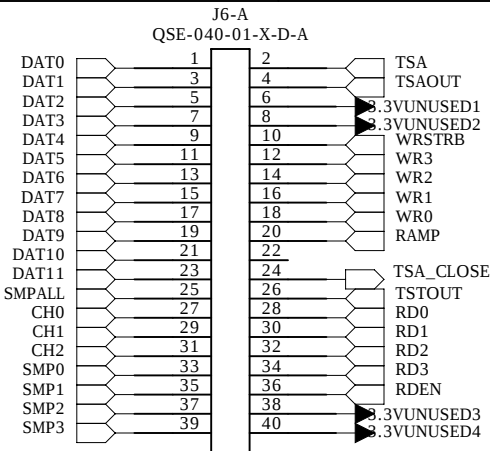
A

D

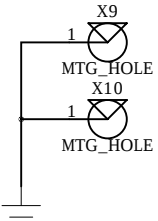
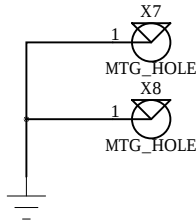
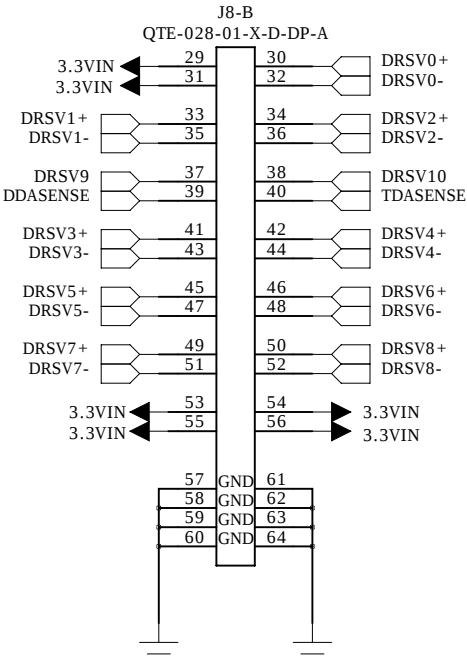
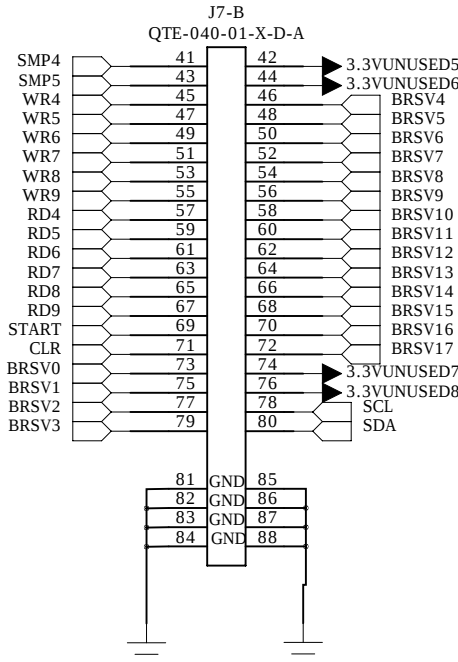
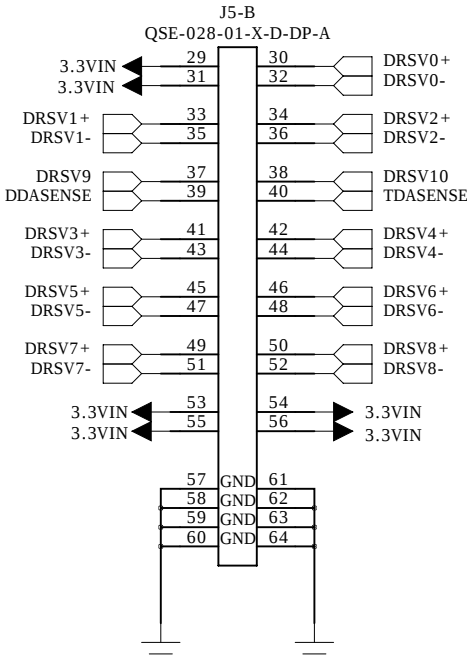
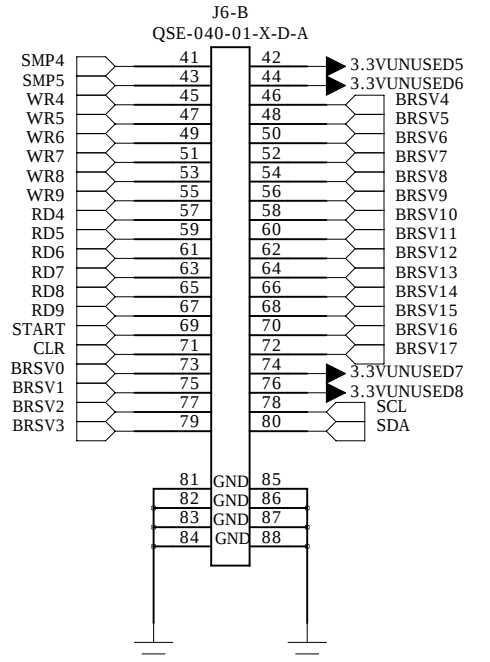
C

B

A



REVISION RECORD			
LTR	ECO NO:	APPROVED:	DATE:



COMPANY: Ohio State University			
TITLE: DIGITIZING DAUGHTERBOARD FOR ARA (DDA)			
SHEET NAME: ATRI_BUS			
CHECKED:	DATED:	CODE:	REV:
PSA	9/15/2010	SIZE:	B
QUALITY CONTROL:	DATED:	DRAWING NO:	1
RELEASED:	DATED:	SCALE:	SHEET: 7 of 10

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B

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REVISION RECORD			
LTR	ECO NO:	APPROVED:	DATE:

Need ~150 mm2 copper area for adequate heatsinking at 50 C ambient

DRAWN: PSA		DATED: 9/15/2010		COMPANY: Ohio State University			
CHECKED:		DATED:		TITLE: DIGITIZING DAUGHTERBOARD FOR ARA (DDA)			
QUALITY CONTROL:		DATED:		SHEET NAME: POWER			
RELEASED:		DATED:		CODE:	SIZE: B	DRAWING NO: 1	REV: B
				SCALE:		SHEET: 8 OF 10	

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1

REVISION RECORD

LTR	ECO NO:	APPROVED:	DATE:

D

C

B

A

U6

tmp102aidrlr

SCL

SDA

1

6

2

GND

3

ALERT

V+

5

4

ADD0

3.3V

CX19

0.1 uF

DDA gets 1001000X for temp sensor address

DRAWN: PSA		DATED: 9/15/2010		COMPANY: Ohio State University			
CHECKED:		DATED:		TITLE: DIGITIZING DAUGHTERBOARD FOR ARA (DDA)			
QUALITY CONTROL:		DATED:		SHEET NAME: TEMP			
RELEASED:		DATED:		CODE:	SIZE: B	DRAWING NO: 1	REV: B
				SCALE:		SHEET: 9 OF 10	

6

5

4

3

2

1

REVISION RECORD

LTR	ECO NO:	APPROVED:	DATE:

3.3V

C10

0.1 uF

SDA

SCL

7

6

U5

SDA IO0

SCL IO1

IO2

IO3

PCA9536

1

2

3

5

TSTST

TSTCLR

IRS_PWR_EN

SM_LED 2

X2

3.3V

R33

3.3k

1

2

R32

100k

1

2

COMPANY:

Ohio State University

TITLE:

DIGITIZING DAUGHTERBOARD FOR ARA (DDA)

SHEET NAME:

GPIO

DRAWN:	PSA	DATED:	9/15/2010
CHECKED:		DATED:	
QUALITY CONTROL:		DATED:	
RELEASED:		DATED:	

CODE:	SIZE:	DRAWING NO:	REV:
	B	1	B

SCALE:

SHEET: 10F 10

A

B

C

D

A

B

C

D